I

DEPARTMENT OF DEFENSE CORPORATE INFORMATION MANAGEMENT

Jun 91

John Carabello
Rene Bean

AGENDA

- Concepts of CIM Doctrine
- The Business Case: Financial Concepts and Issues
- The Business Case Model

CORPORATE INFORMATION MANAGEMENT

- Part of presidential effort to improve management of DoD
- One management method for achieving DMR cost reductions
- An enabler for many DMR initiatives

PURPOSE

Provide an introduction to:

- Corporate Information Management (CIM) principles and objectives
- Effective management in the CIM environment

DoD IN THE YEAR 2000

VISION OF THE FUTURE

- ***Downsized*** Force Structure
- ***Refocused*** Defense Posture
- ***Streamlined*** Business Operations
- ***Simplified*** Business Methods
- ***Integrated*** Business Processes

OBJECTIVE

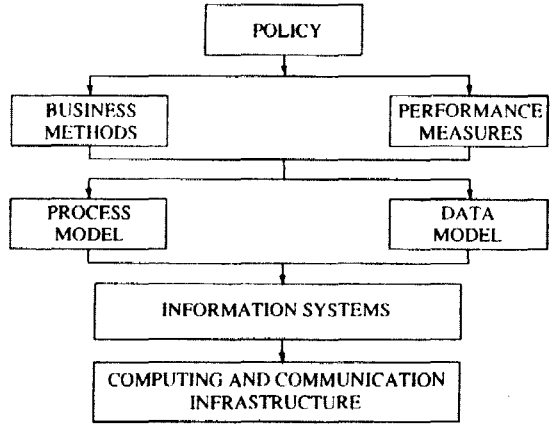
DoD CORPORATE INFORMATION MANAGEMENT

"The primary objective of CIM is business process improvement. The role of information technology is supportive and allows the adoption of more efficient and effective business area management practices."

DoD Corporate Information Management, April 1991, p.2.

claims no "how to" guide
exist, what about the
Process Guide

CORPORATE INFORMATION MANAGEMENT MODEL



PRINCIPLES

DoD CORPORATE INFORMATION MANAGEMENT

- Centralized direction of functional methods; decentralized execution
- Decisions based on business case analysis
- Centralized guidance for application of standard information technology
- Risk management through evolutionary migration of existing systems
- Benchmarking against best accepted methods

POLICY

DoD CIM MODEL

- Guiding principles and operating fundamentals that determine direction
- Represent choices among alternatives
- Frame business methods and business performance measures

What is the goal of our business?

BUSINESS METHODS
DoD CIM MODEL

- Defines the way business is to be done
- The goal is simpler, integrated business methods

How do we want to do business?

PROCESS MODEL
DoD CIM MODEL

- Document business methods by graphically describing activities and their relationships, linkages, and dependencies
- Required for each primary corporate function

What will the activities of our business be?

PERFORMANCE MEASURES
DoD CIM MODEL

- Provide framework for evaluating effectiveness and efficiency of an organization's business methods and resulting operations
- Permit comparative evaluations and provide insights

How do we judge how well we do business?

DATA MODEL
DoD CIM MODEL

- A representation of the data necessary to execute the business methods
- Formally define the terms used in a business method and their relationships, linkages, and dependencies
- Captured in the data dictionary

What will we need to know to do business?

PROCESS AND DATA MODELS
DoD CIM MODEL

- Facilitate functional integration
- Facilitate simplification of business methods
- Provide a stable platform upon which to build information systems
  - Facilitate data sharing
  - Facilitate systems integration
  - Simplify system design
  - Reduce system maintenance

12

THE INFRASTRUCTURE: COMPUTING & COMMUNICATIONS
DoD CIM MODEL

- Combines computers and communications into a comprehensive "information utility"
- Provides the means to create and leverage knowledge
- Includes core and end user facilities
- Allows widespread data sharing

What information technology will support our business?

INFORMATION SYSTEMS
DoD CIM MODEL

- Implement business methods and performance measures
- Process and data models must be completed before information systems can be developed and integrated
- May be common system or unique system

How can technology help do business?

13

IMPLICATIONS

- Functional leadership
- Merging of business planning/information planning
- Business process and information technology integration
- Functional integration
- Data/information sharing
- Focus on business first, technology second

FUNCTIONAL LEADERSHIP ROLE

- Determine business goals
- Define business methods and processes
- Establish and implement business measures of performance
- Document business processes

16

FUNCTIONAL LEADERSHIP ROLE (Continued)

- Establish information standards
- Identify and prioritize information system requirements
- Develop information plan
- Make the business case

17

BUSINESS CASE

CORPORATE INFORMATION MANAGEMENT

- Provides a uniform basis for analysis and comparison of alternatives
- Assures that action will improve management of the Department while making sound economic sense
- Supports the decision making process

18

INTRODUCTION TO ACCOUNTING, FINANCE, & THE BUSINESS CASE

"Because of the difficulties in goal-setting and measurement, I have concluded that unless an information technology has measurable financial outcomes, the clarity of its goals is questionable."

Paul A. Strassmann, *The Business Value of Computers*, p. 74.

TOPICS

- Cost accounting
- Financial concepts
- DoD considerations & application
- Business case analysis
- Business case model

COST ACCOUNTING

- Typical classifications
- Direct/indirect
- Fixed/variable
- Controllable/non-controllable
- Overhead

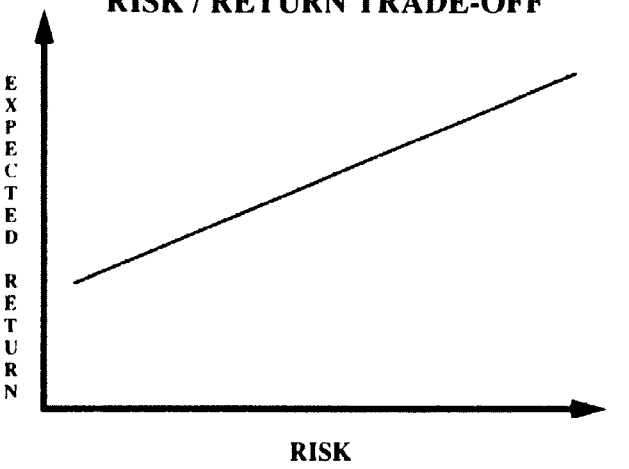
FINANCIAL CONCEPTS

- Capital budgeting
- Time value of money
- Risk / return trade-off
- Discount rate
- Present value & net present value
- Residual value

CAPITAL BUDGETING

A method used for evaluating, comparing, and selecting projects to achieve the best long-term financial return.

RISK / RETURN TRADE-OFF



TIME VALUE OF MONEY

- Factors:
  - Inflation
  - Risk
  - Preference for liquidity
- Equates to earning interest — choice between spending now or investing for the future.

DISCOUNT RATE

- Adjustment for risk and time
- Interest rate applied to future cash flows to determine present value.
  - High risk = high discount rate
  - Low risk = low discount rate
  - Longer time = higher discount rate
  - Shorter time = lower discount rate

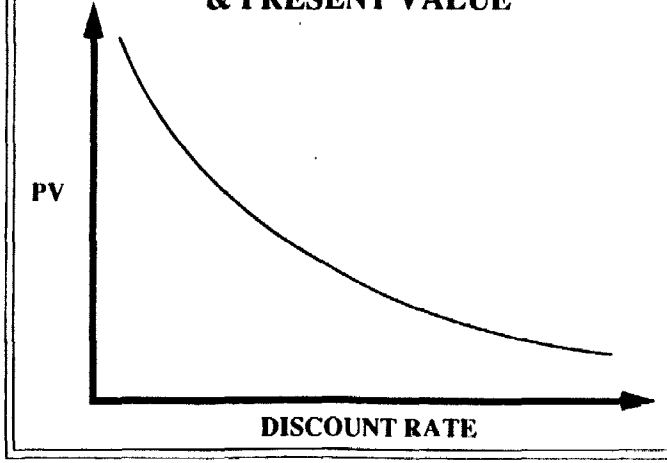
PRESENT VALUE

- Value today of future cash flows discounted at some compound interest–or discount–rate.
- Provides basis for comparing profitability of different projects over a number of years.
- Widely used to measure return on a capital investment project.

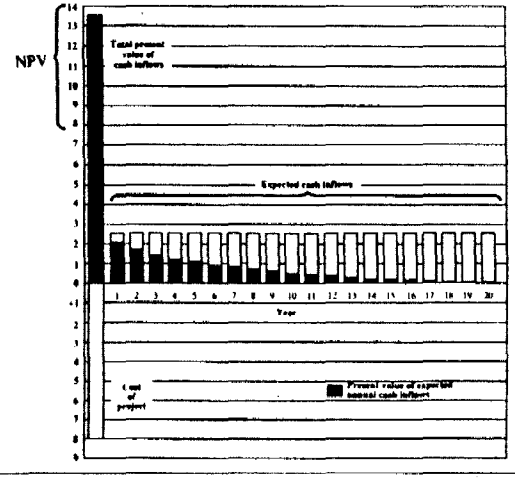
NET PRESENT VALUE ANALYSIS
(Discounted Cash Flow Analysis)

1. Identify proposal and at least one alternative.
2. Estimate cash flows, year by year, that would result from project approval.
3. Determine net present value of estimated cash flows (cash inflows minus cash outflows).
4. Choose alternative with the highest net present value.

RELATIONSHIP OF DISCOUNT RATE & PRESENT VALUE



NET PRESENT VALUE



CRITICAL NET PRESENT VALUE QUESTION

Is it worthwhile for me to invest funds today

(in buildings, equipment, research, etc.)

considering the returns that I can expect to

realize in the future of this investment?

DoD CONSIDERATIONS & APPLICATION

- Budgetary accounting
- Financial data sources
- Fee-for-service
- Unit cost
- Performance-based budgeting
- Business case

32

RESIDUAL VALUE

- Value Beyond planning period
- Current DoD policy is set percentage of investment

57

BUSINESS CASE

- A comprehensive assessment of the economic factors
- Applies to decisions involving
  - Proposed and existing business methods
  - Current and proposed information technology
- Includes benchmarking against the best accepted practices in both the private and public sectors

33

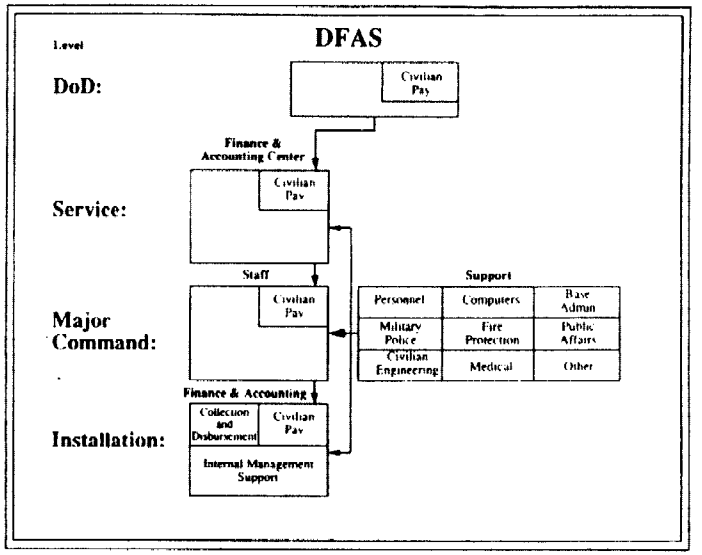
BUSINESS CASE

- Quantifies costs, benefits, and risks
- Compares alternatives to baseline
  - Baseline: business as usual
  - Alternative: management initiative leading to savings
- Baseline includes only business that is subject to change
- Provides one major input to decision makers

THE BUSINESS CASE MODEL

THE BUSINESS CASE MODEL

- Prototype
- Evolutionary
- PC-based
- User friendly/menu driven
- Completes net present value analysis
  - Discounts cash flows and adds residual value
  - Compares alternatives to baseline
- Conducts simulations



COST ELEMENT STRUCTURE

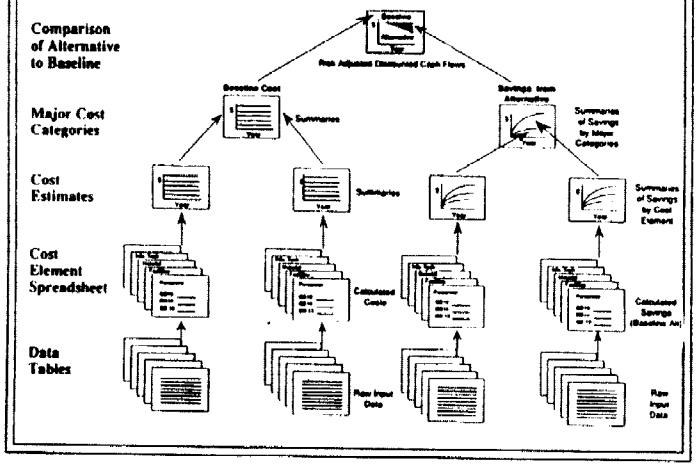
not civ/staff comparable

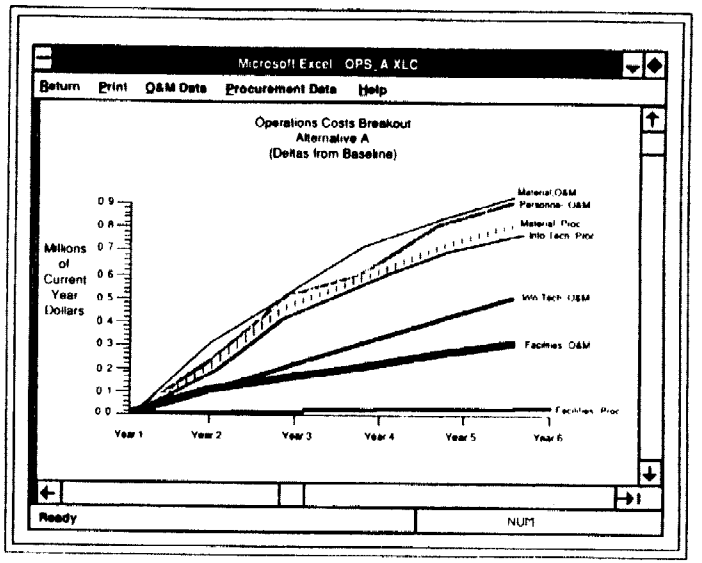
- Primary breakout — Direct Cost
  - Operations
  - Management and support → All Other Cost
- Second level: proposed major breakouts
  - Personnel
  - Facilities
  - Information technology
  - Materials
  - Other
- Additional breakouts to be aligned with unit cost system

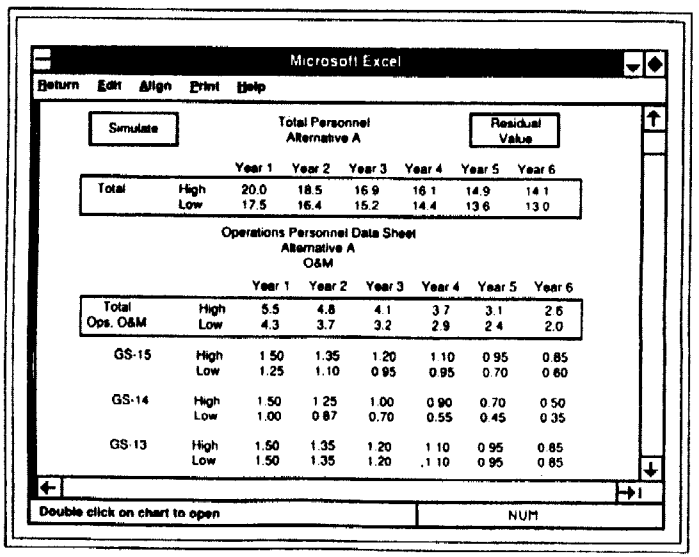
COST ISSUES

- Type of asset purchased: current of long-term
- Cost of Capital
- Traceability to output
- Management control
- Allocating management and support costs

BASE CASE MODEL STRUCTURE

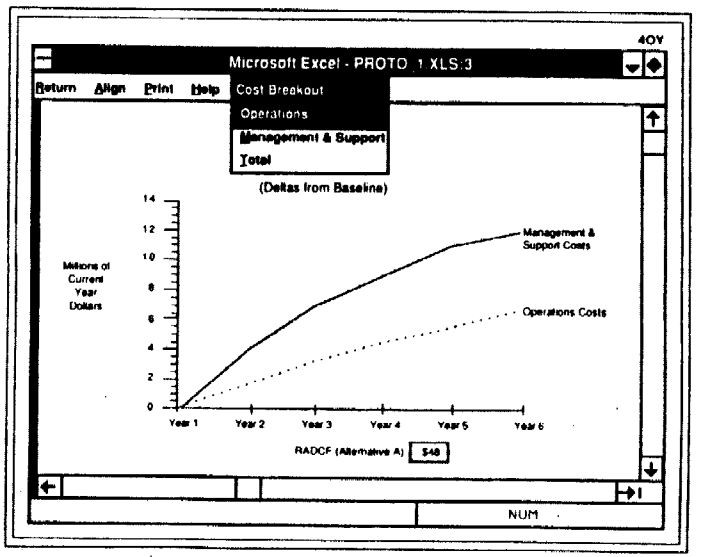


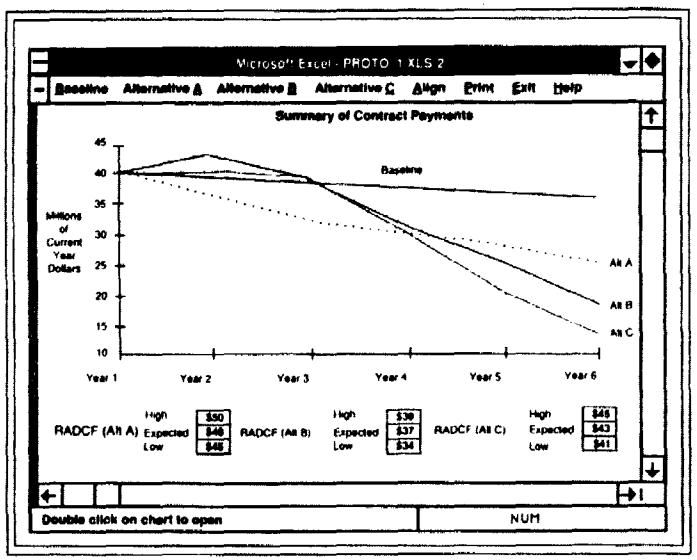




		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Total	High	20.0	18.5	16.9	16.1	14.9	14.1
	Low	17.5	16.4	15.2	14.4	13.6	13.0

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Total Ops. O&M	High	5.5	4.8	4.1	3.7	3.1	2.6
	Low	4.3	3.7	3.2	2.9	2.4	2.0
GS-15	High	1.50	1.35	1.20	1.10	0.95	0.85
	Low	1.25	1.10	0.95	0.95	0.70	0.60
GS-14	High	1.50	1.25	1.00	0.90	0.70	0.50
	Low	1.00	0.87	0.70	0.55	0.45	0.35
GS-13	High	1.50	1.35	1.20	1.10	0.95	0.85
	Low	1.50	1.35	1.20	1.10	0.95	0.85





45

THE CHALLENGE

- Assess current operations
- Develop alternatives
- Build the business case
- Justify current operations and improvements

HARD QUESTIONS FOR FUNCTIONAL MANAGERS

- What does your business really cost?
- What should your performance measures be?
- Can you fill in the data tables?

49

NEXT STEPS

- Develop an understanding of the materials furnished in the reading package
- Begin to look at your individual operation from a CIM perspective
- Develop skills through classes at IRMC and other sources